

PROJECT FACT SHEET

CONTRACT TITLE: Interdisciplinary Study of Reservoir Compartments and Heterogeneity

DATE REVIEWED: 07/28/1994

DATE REVISED: 07/28/1994

OBJECTIVE: Provide tools to be used to detect reservoir compartments and reach a better reserve estimate through complete use of geological interpretations, geophysical analyses, reservoir engineering, reservoir modeling, formation evaluation, and economics.

ID NUMBER: DE-AC22-93BC14891

B & R CODE: AC0540000

CONTRACT PERFORMANCE PERIOD:
09/29/1993 to 09/28/1996
PROGRAM: Supporting Research
RESEARCH AREA: Geoscience

DOE PROGRAM MANAGER:

NAME: Dr. Arthur Hartstein
COMMERCIAL: (301) 903-2760

CONTRACTOR: Colorado School of Mines
Petroleum Engineering Dept
ADDR: 1500 Illinois Street

Golden, CO 80401

CONTRACT PROJECT MANAGER:

NAME: Craig W. Van Kirk
ADDR: Colorado School of Mines
1500 Illinois Street
Golden, CO 80401
PHONE: (303) 273-3749
FAX:

DOE PROJECT MANAGER:

NAME: Robert E. Lemmon
LOCATION: BPO
COMMERCIAL: (918) 337-4405

PROJECT SITE:

Golden, CO
Denver, CO

SCHEDULED MILESTONES:

FUNDING (1000'S)	DOE	OTHER	CONTRACTOR	TOTAL
PRIOR FISCAL YRS	753	0	191	944
FISCAL YR 1994	0	0	0	0
FUTURE FUNDS	0	0	0	0
TOTAL EST'D FUNDS	753	0	191	944

PROJECT DESCRIPTION: An integration of geology, geophysics, and petroleum engineering disciplines will be systemized so that a decision tree, derived from this research can be used by producers to detect reservoir compartments within their specific fields, thus reaching better reserve estimates and improved profits through complete use of diagnostic tools, formation evaluation and reservoir modeling.

PRESENT STATUS: The Hambert Field was selected for the integrated study during the 1st Quarter of 1994 and the data gathering part of this task also commenced during this quarter. Initial core analysis and correlation work indicate faulting and compartmentalization are key components for reservoir characterization in the Hambert Field.

ACCOMPLISHMENTS:

BACKGROUND: There is an industrial need for a comprehensive system or series of systems to economically detect and exploit untapped or bypassed hydrocarbons associated with compartments in already discovered reservoirs. Industry needs accurate reservoir descriptions, developed through the integration of geology, geophysics, and petroleum engineering to more fully exploit these reservoirs. Petrophysical properties, obtained from cores and well logs, as well as the size of the reservoir, size of compartments with reservoirs, transmissibility across barriers separating compartments and probable locations of compartments need to be quantified through this interdisciplinary effort.